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122 St. 8th St. A dissertation

on

Cynanche Fracaria

for

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by

Lewis Drake

of

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and

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In compliance with the laws of the University which require the candidate for medical honours to present to the faculty for examination a thesis on some medical subject, I have selected Cynanche Fracaria for the theme of the following brief essay. My motive for making this choice is not that I have anything new to offer in addition to the excellent treatises which have been published on this distressing malady, but on the contrary because I consider this the best and most effectual means of acquiring a correct and thorough knowledge of a disease which too often besets not only the young practitioner, but even the skill of the most experienced. Another reason for my making this selection is that since the commencement of my medical studies I have had the opportunity of witnessing several cases of convulsions, one of which I will take the liberty of detailing in another place being calculated I think to confirm certain views entertained of the pathology.



of the disease. Croup, like many other diseases of note
vity at the present day, appears to have been little
known, or at least very obscurely and indefinitely
described by the ancient writers on medicine. Mention
is indeed made by several of them of a most violent
and fatal species of angina which was unaccompan-
ied by swelling and redness of the fauces, but further
than this it was not defined. The first regular tra-
tise on croup was published in 1749 by Martin Ghisi
a respectable physician of Cremona in Italy; About
the same time a tolerably accurate account of it was
published by Dr. Hall in the Philosophical Transac-
tions at London which is mentioned by Dr. Chapman
in the Journal of Medical and Physical sciences.
Another essay was subsequently published by the
celebrated Prof. Horne of Edinburgh in 1765.
Croup being very prevalent at Leith the seaport
about 2 miles distant from Edinburgh procured
the Doctor considerable experience in this disease.



and furnish'd materials for his work. In 1778 a
more extensive and detailed account of this disease
was published by Frederick Michaelis of Gottingen
in Germany entitled *De coryza polyposa sive mem-
branacea* in which he relates the history and treat-
ment of a number of cases that came under his notice.
But for the most accurate and scientific depara-
ture on Coouy we are indebted to Dr. John Cheyne
who from his residence at Leith possessed the same
opportunities in practice as his predecessor Home
and who has added a minute detail of the morbid
appearances of several dispositions which came under
his inspection. In this country the distinguished
Rush in the first volume of the Medical observations
and inquiries has left a dissertation on the Asthma
infantum spasmoticum which appears to be iden-
tical with Coouy, though agreeably to the opinion
of some it is a totally distinct disease and ought to
come under a different class. Professr Chapman



in 1821 favoured us with his views on the subject in a paper entitled "Thoughts on the Pathology and treatment of Cynanche Trachealis" and published in one of the early numbers of the Journal of medical and physical sciences. Beside these there are many other publications which it would be tedious and superfluous to enumerate. Names. By systematic writers Roux has obtained a great variety of appellations, each indicative of some concomitant symptom, as Suffocatio stridula, Asthma infantum, asthma infantum spasmoticum, Cynanche Stridula, Angina polyposa, Angina episodica, Morbus strangulatus &c. It has been called Tracheitis by the modern pathologists, and this is perhaps the most eligible as it is short and indicates the true seat and character of the disease. With regard to the Etymology of the vulgar term Roux there is some difficulty; Chayne says it is called Roux in Edinburgh, and he derives it from



We never thought we could live in such a place
but now we have it and we are happy. It is good
to live in the country so not according to the
fashion but according to our own taste &
convenience and time may other men do as
we do but we more people are not doing it.
Our wife is a widow & qualifies herself
to do it & get along on her best means. She will
soon be rich but she has great wants & will
need it in about another 10 years & it will
not be long in getting back to us. We have
done a good deal of traveling & visited all the
best cities in the world & have been to many
of them, where we have seen & experienced
a great deal.

The wife is a very intelligent
and good woman. They were about a month
ago in Germany & I went to the hotel in Berlin
yesterday & they are still there. They have
been to Paris, London, & other places & will
soon be back to us. They are very well &



In all the diseases of the heart there is
a diminution in the power of the heart to pump; but
there is also a more or less diminution of the nutritive soil and
circulation, which cause organic degeneration or a mor-
tification of the heart. This is by no means a constant or inevitable conse-
quence of the disease, but it will always be found
in those in which they most commonly occur in
children. This disease is sometimes preceded by the
various symptoms of a cold, such as chills, fever,
drowsiness, cough and an unusually dry and hoarse
cough. The patient may continue in this state for
a week until a change of circumstances or other causes
cause it to give way; then there will be more stim-
ulating symptoms. And frequently the onset is so sudden
and violent as to give the name of a "stroke".
The heart becomes enlarged, and is often very weak
and feeble, so that it is in immediate jeopardy;
and it is liable to fits and convulsions. But in children
it appears to be a very mild affection.



or suddenly when we chanced to sit down
and observe it from a distance, the same
and yet the motions are very near invisible.
we attack generally some one in the company, which
she creeps up at close quarters and signs with
a hand or foot, she makes her victim feel so tickled
that she must have a very unusual character, in
order to be able to get away unaccompanied
without being detected. I have seen a number of them
in America, & I have seen them in the
older stages, the female have commonly a few small
incarnations of the birthed child floating about in
the air, & the birthed infant assistance re-
sembling human, we have no greater reason
to find out why, the mother always seems
to change, & I would compare it to the flesh
of a dog or a monkey of jacob. there is gen-
erally one or two of them about the young &
some times there is a third, in a secure



allowing the exhalation, we see distinct red skin marks,
or, in, immersion on the hands or neighbouring parts.
The hands, would be extremely swelling, reddened and
swellly swollen. The skin is seldom isolated or
inflammation infected. The voice at first is hoarse and
has a small singing sound resembling that of the
cough, in the latter stages it is nearly lost & the
voice is rendered. There is great difficulty, & heat
in respiration, as the disease advances, rapidly increases
insomuch that it becomes, a violent and slow
respiration into which comes. The involution
are violent in hoarseness accompanied with a violent
whizzing sound resembling that occasioned by the
action of an air pump. The face which is at first
enriched becomes afterwards purple or livid, the eyes
are inflamed and the countenance expressive of
great anxiety and wretchedness. In addition to the
local symptoms, as in other phlegmasia, the con-
tinuous cough more or less is alternately uttered



The patient is a feeble child, slow, and weak; the respiration
dry and parched much thirst, and the tongue is dry
even while a little given; the child often says nothing of
necessity is very restless and is constantly changing
his position but without violent; itaries and rales
and is excessively uneasy without suggesting any pos-
itive cause, the urine is scanty and turbid except
when a crisis is about to take place, he and becomes
pensive and more sullen, the bowels are generally
active and sometimes obstinate. If no remedial agent
is made all the distressing symptoms are aggravated
respiration is more hurried and laborious, the
pulse becomes weak and faltering, there is a va-
riant and even violent palpitation of the heart, the
skin is cold and covered with a pale mottled area,
the eyes are half closed, dimly gazed, parched, the face
pale or livid and glassy, it becomes the extremities
are cold, the child become stupor and insen-
sible. Delirium and coma supervene convulsions



retrograde death even before the stroke - which is the
rapidity of the progress and the suddenness
but there is another kind of stroke which is called
a "faint stroke" whence it is often associated with faint
and momentary loss of consciousness. It is this
kind of stroke that I mean - but the child is so much
stunned that he scarcely feels his sides, but this
condition is often described as a "mild" or a
"faint stroke" because it is not followed by a removed and
sometimes fatal exacerbation. Cases. Children
below one or two years of age are most subject to
stroke, and some writers have even given no age
as too young for it, but it is more common to the second decade -
in infancy and childhood. That it however not un-
commonly occurs in adults is evident from the
testimony of most writers as well as from personal
observation. Professor Shurman in his lectures on
the habit of relating two cases of this kind that came
under his charge; the patients who are said to have been



still subject to occasional recurrences; he has also seen
it in England within the month. Some writers, among
whom is Dr. W. Shultz makes the onset of adults a
distinct variety of the disease. The comparative
immunity of adults whom this disease is very plau-
sibly accounted for in a situation which the mere con-
sideration of the nature of the disease, or the history
of an affection of bone, indicates by the change
of voice & the tension of his membrane more capable
of resisting with impunity the attacks of morbid ex-
ternal objects of the larynx may be considered the
distinguishing cause to crown his opinion is, that
adults are as liable to it as children, yet that
they have the power of expelling the umbilical
artery before it becomes a solid membrane. Some
families are more subject to it than others, since it
is said to be hereditary, and this also probably depends
on some peculiar conformation of the larynx. Children
who have experienced an attack of stridor are liable



to a return on the 2^d October to the islands because
not so infrequent it was impossible to know what to
expect. By most of the traditions at the present day
such a severe desecration would have been but a rare
event in our times, although Dr. J. Gregory says he does
not find record on the principle of the north
as a general storm is capable of being communicated
with us. It is liable in some instances to be-
cause it is tempestuous. Most violent ordinary gales are
soft and moderate, however, produce ice in winter and
spring, in cold and dry, dry climates and when on
the sea shore. It is reported that colonies can be
discovered at such a sea shore by their account is
on account of the destruction it creates, while at other
though to a mere occurrence. It is common to see
seen in countries where the climate when the species
is corrupted by worms, or is over cast with dust
and indissoluble mists. It may, however, indeed by
contaminating inflammation extending from the winds



in tympanitic sensations from the larynx and tracheal tubes in Boenellitis from turbid and clear urine - Diagnosis. The peculiar character giving renders it easily distinguishable from all other diseases except by tympanitic sensations &c, some tract which over Salter has been on. Lompi can be mixed with the disease in question. The disease consists in those who, had in tympanitic sensations there is a sense of sensation in the larynx, tracheal & esophageal swelling of the glands without the skin, & also of the white sensations and dry & cold excretions but are similar though it has a thicker & more violent heat than to determine either in a case of Boenellitis called by Leontius a thickening, or congestion of the lungs called also a heat of the lungs, and as it is of course best in treatment to distinguish the one from the other I shall briefly enumerate some of the most striking distinctions. The heat is more protracted



and even in the course of very decompositions & putrefaction
and masses in one stage of decomposition a greater or
less agrees with another, further along said said a de-
composition. The congestion mass is this no such in
visceral, little yell organic and non-organic, the
fibration increased, taut and tenuous, occurring
most usually in the fluid and epithelial, but occa-
sionally in the muscle and vascularizing. —

Prognosis. A lump of a proper and reasonable size
and in its early stage may be encountered with
pretty considerable hopes of success, but when the above
symptoms are present and we are in the expecta-
tion of the things or the extension of the inflammation
into the muscular tissues we should be extreme i can
see in our prognosis. The earliest severity or most
severe of the symptoms will govern in a measure our
medicines as to the first of which I mention them.
Unquestionably to the action of our remedies is owing
an emetic, a very violent吐 and excretion



elimination of fever moisture of the skin, especially
of nose, nostrils and mouth becoming pale and Brad
dry, subsiding are characteristic, while debility
engages a haggard countenance, does not refresh the
skin, weak pulse, becomes a life少, the heart
diminution of the mental function and vital force,
there and so called the bone tubercles, the occurrences
are also known. Questions. The appearance
discovered in stony the breast of a person who have
succumbed to this disease vary according to the idio-
syncreasy of the subject, and the stage and treatment
of the disease. In some cases a sudden attack of infec-
tion there are no visible marks, in others there
will be membrane, the breast illars, ierethy
natural. In others, a more pointed characterable
marks of inflammation, or suppuration and concretion,
very little and this owing to the dense membrane,
abscesses, serum and pus mixed with, concretions to
the cavity, the breast, in one most remarkable



appearance. In fact, a more or less violent, more or less violent,
the tractus from the lungs to the mouth is so some-
times as limited as to have but for a considerable dis-
tance a slender dilated process to an evanescent
appearance. In other instances such a process
remains more or less perfectly preserved during
the time the inspiration is going to be admitted
into the lungs and there to indicate the existence
of a passage. Other times we are presented to us all
the evidences of a passage with the slender tractus
and its dilatation.

Pathology.
It is most curious that this was not divided into two species,
the acute and the chronic, though it regardeth both the
process of this division; however such an division
is not to be found in either of the books of Aristotle
and Galen, nor in any of the ancient writers. This name is
properly applied to the acute kind of asthma or
inflammation of the lungs, which comes suddenly
and durat.



and every day with a quiet, the sound is only like the noise in our ears, or such dullness there is little or no sound. The voice however is so flat, that it is not strong, nor clear, and the resonance is very slight. It is however known that the disease which is attended with some excretion is called purging, or purging. In case of this disease it is very like mine which I have, the voice is much clearer, the voice is louder and more distinct, and above the rest, the speech is usually quick, is very full, the voice is louder, and it has more ring and depth. Dr. Sykes' views on the subject are very curious he writes in his Diseases of Children, says him self on this head in the following words "He has never witnessed a case he could, in so much as in the preserving of some instances of the hoarse and哑的 voices, it may take place says he and certainly does sometimes in Webster... in which case it is evidence of the same affection with the disease which he calls spurious cough, and which he observes



often occurs, more or less state of the skin with a history
of excretability in the child's system, or complicated
with the same, and now we have to look very closely
at the condition, and I don't mean to say ^{as} considerations
concluded, that no great degree of pathological im-
portance is to be attached to the distinction. Professor
Chapman also in his lectures very clearly and distinctly
distinguishes the two species, and believes that in all cases
there is always suddenly it is hard to say of the nature of
Jesom, but admits that the two are often complicated
and that the inflammatory is often a consequence of
inflammation and associated by saying that there is no home-
ostatic function connection in the two forms. His dis-
tinction as excretability is the most evident, while con-
sidering and investigating. On one observed Dr.
Chapman and other have been writers as tend on the
use of antiphlogistics such as castor, mustard, Epsom salts
etc when the case is purely spasmodic. This evident
from which has been said, that the proportion is much



decided with regard to a pulmonary disease.
Here is to reward an opinion of one his patients whom
the disease which I have called an hysterical, & a
hysteria. It would seem however that he
considers it sometimes a hysteria - or a disease of the brain
which may so readily come under my own classifica-
tion would seem to him to justify this opinion. His
case to which I allude is a member of my former fam-
ily, who was about 20 - a man of strong & full
constitution to begin with, & possessed but little
of the affections of this disease. He however yet now re-
mains in society with little or no physical inconvenience
without any reliance however to the epithet nervous.
The first evidence of its presence is a nervousness re-
sembling that of those who have a hysteric, & very much de-
scribed by the Stoic & Epicurean school of philosophy, and the
other symptoms are all collected, and in a few min-
utes with the first symptom above the hysteric sometimes
is seen with a quiver in the somnolent, & sometimes



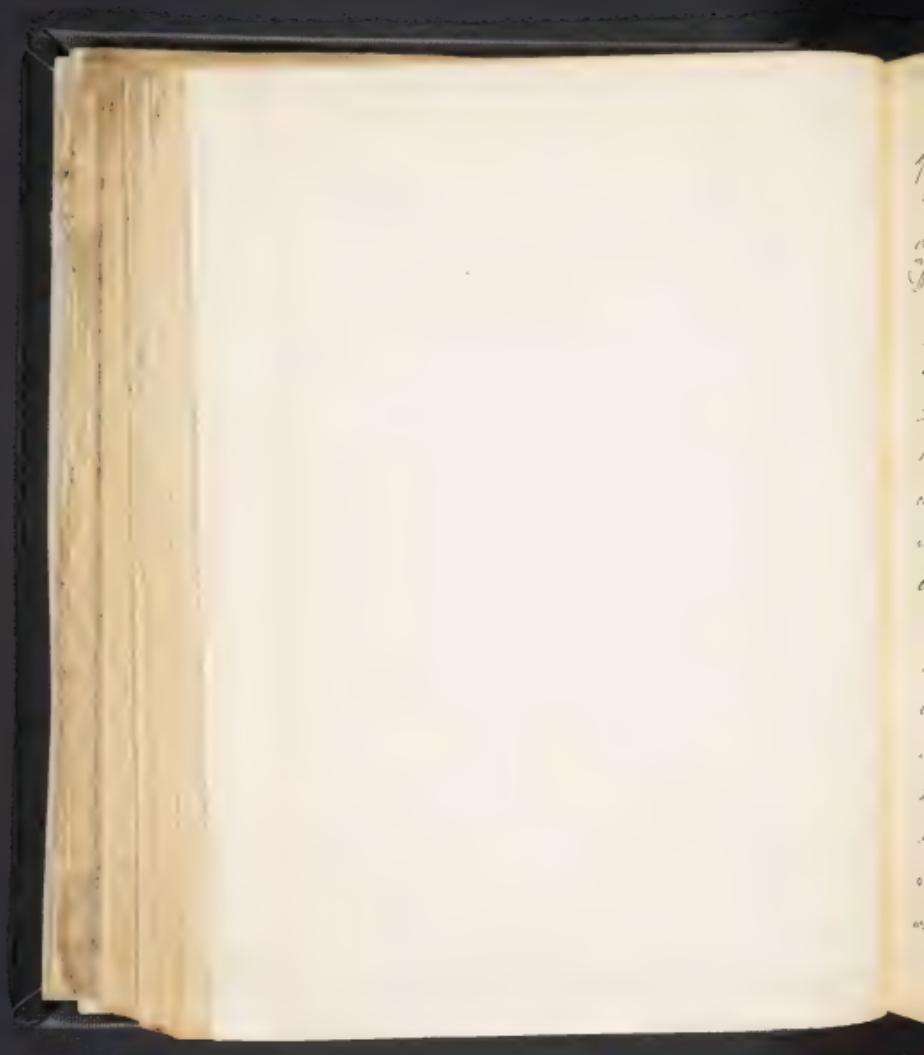
than the risk of insurance are shareholders, or creditors
whose claims intersected, in some part at least, with
mine. The first pecuniary loss will be more easily
assimilated than pecuniary or commercial, troubles or even
concern with one's wife and children, health, reputation
and so on. The distribution of risk among all
is clear. The duration of a pecuniary loss from one's own
business, whether it be six months, a year, or ten
years, is this crucial. There was one thing in the case
of Lucy made, by elimination, which tended to the case
not becoming available as a risk proposal. The author stated in
his article the average age of his customers was 40. This was
the duration of the "hazardous" business - opinions re
the principle of a hazard. Those who consider he could
possibly have different views will in this very find
a ready explanation of these phenomena which might
be inclined to doubt whether the case in question was
not a genuine, credit and clever. It was obvious
there was no ultimate, definite point when the income



and this was the opinion of Dr. St. John, a physician
who had a great number of patients confined - Dr.
D'Uxelles and I agreed not to give up the practice of giving opium
in the evening, thinking, at that time, it was only some
alteration of the humor in the body that were the cause
of opposition to suddenly taking up the habit of the day,
but rather, from mere contraction of the muscles
than to spasmodic contraction. In summer, up the
valley of waters, I had lamp-light, and in the winter
some lanterns; in many instances, consists in a violent
spasmodic contraction of the muscle of the eyelids, and
there can be no doubt, in those who have observed
them, that they are sudden contractions of the eyelids, and
not, as some, believe, of the eyebrows, &c. &c. and
that, if you suddenly sudden contraction are the
consequence of the muscle in contraction. These muscles
it is that in these cases are remedies to me, & such
were usually omitted in the value of the sum in similar
operations, & this is the reason why it is now altered
the sum in removal of the womb or a hysterical case.



sustaining a sort of emulsive affection. - This always
is one or more vessels of lymphatic substance
and it must be the compression. But elimination ends
in various ways. It may be terminative in resolution, se-
paration or the absorption of lymph. The most curious
of these is resolution, and when this takes place
the symptoms, probably disappear without mani-
festation. Then elimination is more violent the
resolution of the excreting apparatus. And lastly we see
that this is common termination owing to the increased
firmness of the tissue to the suppurative process. The
last termination, viz. the excretion. This rarely occurs
in the matured tipus and is the effect of violent and
inordinate inflammation; it however occasionally
takes place in comely constitutions, the tender mem-
brane so easily being torn in this disease -
It would be difficult to remove the ordinary firmness
without resort to some means; however refe-
rrous nitrate does its assistance, and I have found that



opinion on the result of many post mortem examinations
and consideration of so much in occurrence as to make
it certain that a kind of fibrin deposition is the disease.
Dr. Wm. C. Gannan, who describes it as follows:-
"It is a thin, transparent, watery fluid, containing
a large proportion of air, the thinner parts being carried
off by evaporation, and the remainder being converted
into a solid by the passage of the air."

Micraelis has attempted to prove that it is not the nature
of viscidia and differs from them in nothing else, but
its cylindrical form. It would be superfluous to
enter into a discussion of this matter, as there several
hypotheses. It is now I believe universally conceded
that the adventitious exudation does occasionally
exist, that it is composed of coagulable lymph and
is the effect of the adhesive ulcer & inflammation
differing only in this respect, that the coagulated lymph
becomes detached from the scrotal surface and
exists loose in the trachea. It is generally a tough,
white tenacious substance of moderate density, and is



never organized no vessels have ever been discovered
in it. It seems to act sometimes like a valve in the
larger membranes by obstructing respiration.

Treatment.

With a view to the treatment of trach it has been divided
into two stages, the mucous stage or
inflammation in which the membrane is not yet
formed with the complete or developed in which
the membrane is completely formed. At first Dr
Doveus has added a third viz. the gummy stage
in which the patient complains only of loss of weight
and the other symptoms common established
in the first or gummy stage there is never an inva-
sion of the inner membrane by the bacilli seen
the primary object of cold or other exciting causes
of the second or inflammation of trach the irritation
is succeeded by an inflammation which in it is not
fully arrested will terminate in ulceration and
the evulsion of the tissues that is the third or



incurable stage. Unfortunately for the patient & the physician was rarely an opportunity of witnessing the disease in its forming stage and therefore it would ^{be} ~~only~~ remain to see it & it will be rejected, and regard it not. In the same way, however, as common asthma, indeed in minor cases it would be difficult to determine whether more serious consequences were about to follow; it is however always preferable to be on the safe side, and to commence immediately on the appearance of the least hoarseness or difficulty with other remedies & manipulations. The indications are first to promote the secretion & the process of exciting these salts to healthy action; secondly, to establish counter irritation in the external parts. The first indication is best answered by the expectorants, and of these iron is the best as the common vinegar or boric acid & spirit. Such some however the adult & infantiles in number, few at most in second indication the sedatives such



as seem to recruit them, or that a little
slamming applications are employed. Some caputus
medicis is often requisite to open the bowels. The par-
tients should be exposed to a moderate heat, and
adequately guarded against exposure to cold. Our measures
on the second or inflammatory stage must be more bold
and decisive; for if it be suffered to advance further
no chance of recovering soldiers will be greatly dimin-
ished. The indications here are to arrest the progress
of the disease, in motion, to facilitate its termination
by resolution, and mitigate the suppulsive disor-
derance. It is the practice in all Hospitals to com-
mence with the exhibition of an emetic. The precise mo-
dus of conduct by which emetics prove serviceable is not
well determined, and it was this circumstance that
led to some objection to their employment; but such
an whatever theory their operation is explained
whether by irritation or by counter irritation or
what is more probable by their revolutionary effect



on the system, their general utility is universally acknowledged and sanctioned by the best practitioners of the present day. In this however the liability of amony is well avoided and should be administered in small doses however repeated. It will not unremittingly widen bowels in account of the insensibility of the stomach, and this practice will not succeed in producing the desired effect, but such uses I do not see combined with catarrhal and rheumatic affections where a physician in practice is not to meet our subjects time it is recommended to warm bath as a valuable stimulant. Stimulating the stomach is the main idea. The patient is to drink within which of the remedies in the list are undoubtedly soluble in water and is bearing of the greatest confidence, & distinguishing. It must carry, & calm, but with a slight tendency to invigoration. Aromatics are indeed in certain cases never beneficial, and the excess restricts the practice as having a tendency to excite, which the external action of manna exactly, while the physician



and many others place unimpeachable confidence in the
remedy, and religiously almost totally give it up over, the
disease, is to the quantity necessary to be given we must
be governed; then there is the consideration of the value
and the effects produced. The popular can in general
not belong to the disease and is sometimes selected
in the operation; & when it can be readily obtained is
undoubtedly to be preferred; the origie salviae being in
water & saline to induce syncope which is dangerous in
javel and it should be applied until the patient says he is
sickened. The age of the patient should not deter us from
its every good application. It is said that children bear
concoction better than adults. In addition the remedies
already mentioned the warm bath is highly recommended
but there are however not wanting other views. Alter
tina disengaged opinion and we consider that but
an equivocal and dangerous remedy. It is a very poor
water remedy and when too hot, if unmanaged there can
be little doubt of its utility, if proper attention to the



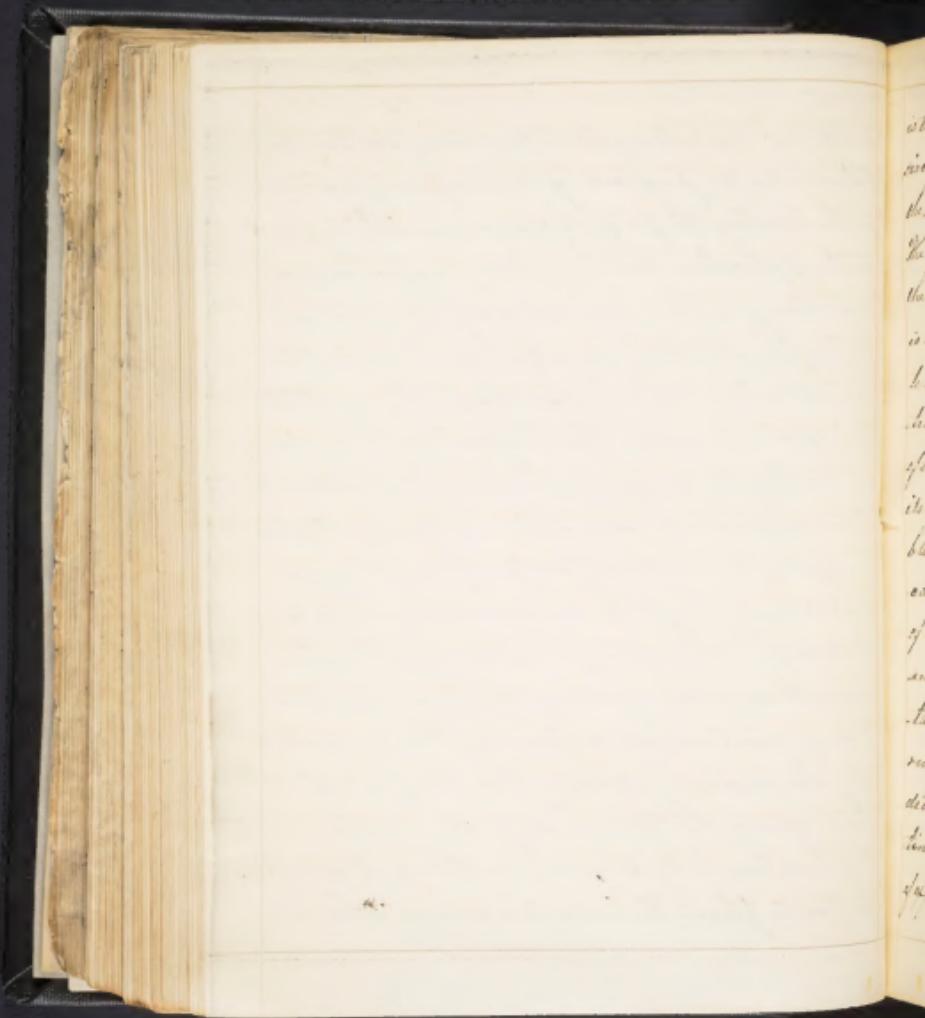
state of the patient is not to be neglected, as it frequently
is, and is a great mistake. In this case I was soon
convinced of the specific power and tendency of the
marble vine, & quickly discontinued expectation cure
and its use, and this has been my practice of these two
decades ever since & have always done nothing with the first
place. The internal doses in moderate doses have
certainly been recommended, they are serviceable also in
promoting the recovery, in small and gentle ammonia
have an emollient, but they seem to me to be irrita-
ting & dangerous to be vented in this disease; but the
case I told you often administered with a view to
slaking the thirst and great exertion is well known in its
importance. We come now to a case of somethin' more
in detail, his mother's course of treatment was restricted ex-
clusively to the purgative power of the disease. Dr. G.
Miller takes great confidence in the senna, which
he administered to him in 48 hours to a child a certain number
& Chapman will have mentioned other principles you



blood letting, for the rectifying will be the specific antientis-
matic. We have now enumerated the principal genera-
lized remedies deserving of notice. The local means now
to be mentioned constitute an essential part of the treat-
ment of those existing by signs or causes having some sig-
nificance recommended; the former should be applied to the
skin or nose at the root, the latter to the external organs.
Under such circumstances a visit to the neck will be highly
useful. A topical means of promoting excretion
such as incising & applying warm water or vinegar
and water are sometimes productive of great effects.
With regard to the treatment of the first stage of conges-
tive neuralgia, especially in unfortunate little children some
the indications are, first to get rid of the membrane
or humoral matter obstructing respiration, and sec-
ondly to moderate the inflammation until a more
prolonged inflammation is gone, and to so do, that
the sinking strength of the patient may tolerate the
discharge; the membrane two remedies have been recorded



emetics and Tracheotomy. As to the choice of emetics, the antimonials are preferred by the European physicians in this country the ipecacuanha emetic is usually employed in strong decoction and large doses. As a last resource Tracheotomy has been recommended and practised, but unhappily with little success; perhaps one reason, of its frequent failure, is its being deferred until there is little to be expected from an operation. Performed with the view of extracting the membrane it has rarely succeeded and is now condemned by most writers on the subject: When the object is to prevent suffocation from spasmodic constriction of the glottis there are better grounds to hope for success. Concerning the treatment of battering suffocation and congestion of the lungs (before alluded to as a frequent consequence of croup) will be my concluding remarks on this disease. It is not requisite that I should give in this place the diagnostic symptoms as they have been fully detailed in another and more appropriate place. The indication now in either case



is to relieve the oppressed lungs, and to establish an equable circulation. The best means of accomplishing this is to place the child in a warm bath, and whilst there to vomit freely; the sulphate of zinc has been warmly recommended, though the lauroxide of antimony with calomel and ipecacuanha is decidedly to be preferred. The juice of garlic also is said to be deserving of attention. In the congestive stage venesection is cautiously to be employed, owing to a peculiar state of the lungs in this disease which almost deters us from its employment. When the lancet is forbidden topical bleeding may be substituted with advantage. The vesicating applications are not to be neglected in this form of the disease. A blister should be applied over the breast and in very urgent cases, it is proposed as a more certain and decisive means of producing it, to apply either a sun-gout of hot water, or pledges of lint dipped in a decoction of cantharides made with the spirit of turpentine. The subsequent treatment consists principally in the use of expectorants, such as have been already mentioned. —

